

ORIGINAL

Before the
Federal Communications Commission
Washington, D.C. 20554

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Federal Communications Commission
Office of Secretary

In the Matter of

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Advanced Television Systems
and Their Impact Upon the
Existing Television Broadcast
Service

MM Docket No. 87-268

To: The Commission

PETITION FOR RECONSIDERATION

Gilmore Broadcasting Corporation ("GBC"), the licensee of WEHT(TV), Evansville, Indiana, by its attorneys and pursuant to Section 1.429 of the Commission's rules, hereby respectfully requests reconsideration of the Commission's Sixth Report and Order ("Sixth R&O"), FCC 97-115, released April 21, 1997, 62 Fed. Reg. 26684 (May 14, 1997), insofar as it allocates and assigns paired channel 59 to WEHT(TV), for digital television ("DTV") service.¹

¹ Throughout the course of the above-captioned proceeding, the Commission has made several modifications to the DTV Table of Allotments contained in Appendix B to the Sixth R&O. Accordingly, the impact of the assignment of DTV channel 59 to WEHT(TV) could not be fully analyzed prior to the release of the Sixth R&O. Moreover, the unavailability of OET Bulletin No. 69 has prevented GBC from fully assessing alternative DTV channel assignments. In view of GBC's previous lack of a meaningful

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WEHT(TV) currently operates on NTSC channel 25. In the DTV Table of Allotments contained in Appendix B to the Sixth R&O, the Commission has allotted DTV channel 59 to WEHT(TV). Appended hereto is an Engineering Statement indicating that there is currently available insufficient information upon which to gauge the replication of WEHT(TV)'s current NTSC coverage or to determine whether channel 59 will afford GBC sufficient flexibility to remain competitive in the market as the stations therein maneuver to maximize their service under the new DTV rules. Unfortunately, Office of Engineering and Technology Bulletin No. 69 ("OET Bulletin No. 69"), which clarifies the Commission's methodology for evaluating coverage areas and interference is not yet available. Without examining OET Bulletin No. 69, it is impossible for GBC to determine with certainty all of the implications of substituting another channel for channel 59, and, indeed, cannot determine which channel might be the most appropriate. Accordingly, GBC respectfully requests that it be allowed a reasonable amount of time following the release of OET Bulletin No. 69 to supplement this petition.

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opportunity to address its specific DTV channel allotment, and the important public interest issues raised herein, GBC submits that it has standing to file this petition for reconsideration pursuant to Section 1.429 of the Commission's rules.

In any event, however, a DTV channel within the Commission's "core" channels would be more desirable than channel 59 because it would allow GBC to avoid the business planning uncertainties inherent in the use of channel 59, which is outside the DTV "core spectrum."² The use of channel 59 would require the forced relocation of WEHT(TV) to a channel within the core spectrum at the end of the DTV transition period. However, the allotment of a core DTV channel now would eliminate the substantial additional equipment expenses and viewer confusion that WEHT(TV) will otherwise have to bear if it is forced to construct a "non-core" digital facility and then move its DTV service to the core spectrum at some point in the future.

In addition, the Commission has also assigned first adjacent channel 58 to WFIE-TV, Evansville. As indicated in the attached Engineering Statement, however, there remain unanswered questions about the efficacy of adjacent channel operation even where the transmitters are relatively close to each other. Thus, GBC also asks that the Commission reconsider its allocations in this

² At the end of the DTV transition period, the Commission intends to locate all DTV channels within a "core spectrum" of either channels 2-46 or 7-51. See Sixth R&O at ¶ 83. Thus, Channel 59 would be outside of the core in either scenario.

respect as well, and to assign WEHT(TV) and WFIE-TV channels that would not present this problem.

Accordingly, GBC respectfully requests reconsideration of the Sixth R&O to the extent it allocates DTV channel 59 to WEHT(TV), and urges the Commission to amend the DTV Table of Allotments and assign WEHT(TV) a core channel as discussed above.

Respectfully submitted,

GILMORE BROADCASTING CORPORATION

By: 

Jerry W. Haines

of

WILEY, REIN & FIELDING

1776 K Street, N.W.

Washington, D.C. 20006

(202) 429-7000

Its Attorneys

June 13, 1997

**ENGINEERING STATEMENT
IN SUPPORT OF
PETITION FOR RECONSIDERATION
MM DOCKET 87-268
ON BEHALF OF
GILMORE BROADCASTING CORP. (WEHT-TV)**

JUNE 1997

**COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.**

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

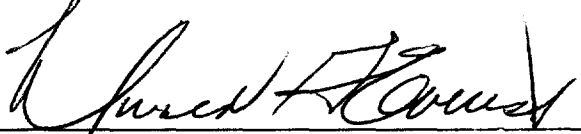
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

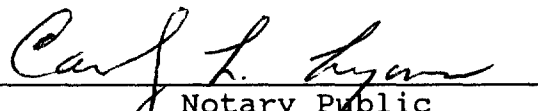
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.


Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 12th day of June,
1997.


Notary Public

My Commission Expires: 2/28/98

This engineering statement has been prepared on behalf of Gilmore Broadcasting Corp. ("WEHT"), licensee of Station WEHT(TV), Evansville, Indiana. This statement is in support of a WEHT's Petition for Reconsideration for the Sixth Report and Order, MM Docket No. 87-268¹, of the Federal Communications Commission ("Commission").

WEHT has authorized this firm to conduct studies on the various aspects of the Sixth Report and Order. This study was conducted on the impact of the Report and Order on WEHT's current NTSC service; the interference which could result to existing service by new digital operations; and the service replication by the assigned digital television ("DTV") operation.

WEHT(TV) operates on NTSC Channel 25, but has been assigned DTV Channel 59, with a power of 54.1 kW at a height above average terrain of 314 meters.

COVERAGE ASSESSMENT

A study of the WEHT's NTSC and proposed DTV service areas have been performed by using the National Telecommunications and Information Administration Institute for Telecommunication Sciences ("ITS") computer and the Communication System Performance Model--Point to Point Irregular Terrain HDTV Model ("HDTV Model"). The HDTV Model uses the Longley-Rice propagation methodology and evaluates in grid

¹MM Docket No. 87-268, "In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service," adopted April 3, 1997.

cell size of 0.75-1.5 km with 3-second terrain data intervals between every 90 meters to 100 meters at one degree intervals. This HDTV model was selected since it appears generally to replicate the Commission's DTV assignment model.²

However, the HDTV model is useful, it does not provide guidance for the Longley-Rice model that the Commission uses to determine the DTV power to be authorized or for explaining the process by which the frequency was selected. Without that information, WEHT(TV) cannot whether its inherent service area is being adequately protected or properly replicated. Until such specific information is available, no meaningful technical evaluations can be performed. This information has a direct impact on equipment selection decisions such as transmitting antenna and DTV power to be used during the transition period. The Commission's DTV criteria need to be well understood before a meaningful DTV implementation can be developed for the station. Incomplete information on Commission criteria and procedures will hamper WEHT from making an evaluation for higher DTV power.

WEHT's current antenna is top-mounted on a tower which the station owns. For an interim operation, WEHT may side-mount the DTV antenna on the same tower. There is no assurance, however, that a side-mounted DTV antenna will replicate the pattern that

²An ITS representative indicates that its their belief that this model follows the Commission's decisions in the Report and Order.

is envisioned by the FCC for the DTV operation. Obviously if pattern replication is placed in doubt, the replicated service area projected by the Commission cannot be realized.

EVALUATION CONCERNS

The Commission in Section 73.622 and Section 73.623 of its Rules, specifies that OET Bulletin 69 which has not yet been released will provide the details of its calculation methodology for coverage and interference. Further, the Report and Order does not disclose how the DTV assignments were made, nor has any formal clarifying information been made available.

Without full knowledge of the Commission's calculation methodology for service interference and the DTV frequency assignments, WEHT cannot make a critical independent evaluation of the impact of any DTV operation may have on its NTSC current service.

FIRST ADJACENT DTV OPERATION

WEHT is concerned with a DTV facility assigned to WFIE, another Evansville television station, first-adjacent to WEHT's DTV frequency³. WEHT believes that based upon tests performed in October 1996 by the Advanced Television Technology Center, the

³The transmitter sites are separated by a distance of 5 km (3 miles). The Commission should factor separations of this magnitude when reviewing the first adjacent channel ratios.

first-adjacent channel criteria used for the Commission's DTV assignment model may be inappropriate. It is understood that all first-adjacent channel ratios used in the Commission's DTV model are based upon data measured using a linear (Class A) testbed. The high average UHF powers indicated for WEHT's and WFIE's DTV facilities can be generated only with RF amplifiers operating in the Class A-B mode. It is well known that intermodulation products will occur when the RF power is developed in devices not perfectly linear. In addition, non-linear propagation path effects such as multipath also can occur. The reception of first-adjacent DTV signals in the same area needs to be revisited and appropriate ratios established.

CONCLUSION

Without further information on the assumptions underlying the Commission's DTV Table, WEHT does not have the information necessary to evaluate service and interference issues. It requests a substitute lower DTV channel than Channel 59 for technical reasons (first-adjacent to WFIE's DTV Channel 58) provided above.